



Photo source: Perry's Perennial Pages, Gardens of the Month as seen on <http://pss.uvm.edu/ppp/gardens/hudson03.JPG>

Edible landscaping or “Permaculture is a verbal marriage of ‘permanent’ and ‘agriculture.’ Australian Bill Mollison pioneered its development. Key features include: use of compatible perennials; non-invasive planting techniques; emphasis on biodiversity; specifically adaptable to local climate, landscape, and soil conditions; highly productive output of edibles.”

- An excerpt from *Gai'a's Garden: A Guide to Home-Scale Permaculture* by Toby Hemenway. Taken from the forward by John Todd.

Introduction

What is edible landscaping?

Edible landscaping is the use of food producing plants and trees within the constructed landscape around your home. In other words, landscaping your property with plants that yield food for you. It can include fruit and nut trees, berry bushes, herbs, edible flowers, vegetables, or ornamental plants. The design can be incorporated into any garden style and can be 1% or 100% edible.

There are many reasons to start an edible landscape. They can be purely because you love black raspberries, but don't want to pay \$6 per pint, or to enjoy freshness and flavor of homegrown fruits and vegetables, to increasing food security, saving on grocery bills, or controlling the amount of pesticides and herbicides on your food.

Additionally, you can select more heirloom varieties with more flavor, support biodiversity and increase nutrition by eating fruits and vegetables that are minutes, instead of hours or days, off the vine. Nutrient content and flavor are highest immediately following harvest. Whatever the reason, utilizing an urban, or rural, home landscape can provide a beautiful alternative and

enhancement to ornamentals while providing food for your table.

Edible landscaping is an ancient practice dating back to medieval monastic and Persian gardens that contained both edible and ornamental plants. In this country the edible components to landscape gave way to shade trees, shrubs, and lawns, but a revival of edibles has slowly been making its way back into our flower beds over the last two decades.

Like any other plant, edible plants grow best under certain conditions. Many fruits and vegetables need six or more hours of sunlight each day, but not all. It is also important to have proper drainage. Consider doing a few soil samples in various areas of your yard to determine the soil type and need for nutrients. Various resources are available to help with complete makeovers for these areas with problems. Start small maybe a one-for-one plant substitution for a few plants. Where you may have planted a shade tree, plant a fruit or nut tree. Want a deciduous shrub? Plant currant, or blueberry.

Market Information

There is not much market information to discuss because this type of agriculture is usually for the

sole benefit of the gardener or household. However, if you find your edible landscape producing an abundance amount of food, consider selling or giving to your neighbors, or donating to the local food bank. You might also contact a small local restaurant or corner market and see if they would be interested in buying from you. Accordingly, another outlet could be your local farmers' market. If it's not worth the hassle to deal with any of these outlets, maybe there is another local farmer who would buy them from you to sell at their farm stand or weekly market. Also consider freezing, drying, or canning excess for winter storage.

Production Considerations

Because there are many different plants and designs to consider for edible landscaping, individual productions practices will vary. This section will discuss general techniques, ideas, and resources for planning your landscape.

As in any garden or landscape your design should begin with a plan. Be mindful of the location and outside influences. Is there a view that you would like to frame, or something you would like to block, sun angles, wind intensity,

play areas for children or pets. Do you prefer the architectural, tidy style, or cottage garden look?

Typically you want to think in terms of height for each layer of your landscape. Start with taller trees or massive shrubs in the back, then smaller shrubs, maybe vines, and finally vegetables or herbs. You also need to consider yield times for all plants involved. You would not want all of your fruits and vegetables coming on all at once, leaving your entire landscape barren simultaneously. In Toby Hemenway's book, *Gai'a's Garden: A guide to home scale Permaculture*, and Linda Woodrow's *The Permaculture Home Garden*, examples are included for rotational garden plans and suggested charts for scheduled yield times. It is recommended to stagger your plantings using both annuals and perennials and alternate those reaching their peak performance with those leaving their peak.

For plant species selection, you will have to do a little research. Find out what grows well in your area and maybe what's available at the local nursery. Plants that like your yard and soil will be healthier, require less input, attract few pests and diseases. Accordingly, consider beneficial insect attractant plants (i.e. flowers to attract bees for pollination). Strong aromatic herbs and plants can deter rabbits and other vermin. Once you figure out that will grow in your area and yard, ask yourself if you or your family will eat it. There is no point in growing it if no one will eat it.

Harvesting may be the most intense time for your edible landscape plants. Keeping up with ripening may be a weekly, or even daily, monitoring event. During this time it is also important to watch for pests who may find the ripening produce before you do. Berry bushes and cherry trees, may need to be netted. Be sure to secure the netting at the ground also so that birds and squirrels cannot walk under the net and up into the bush.

Edibles may take a little more work than the minimal care of ornamentals, but the payoff for only a few more hours per year, can be a great yield. Some extra watering, pruning, pest management, and possibly fertilization will be required in order for your plants to produce well. It is important to pay close attention in the selection and management of such inputs like pesticides and fertilizers. Remember that your plants are for human consumption, the same fertilizer for your annual flowers may not be the best for your annual vegetables.

Other special approaches to designing and maintaining an edible landscape include crop rotation to optimize fertility and prevent pests and diseases; sequential or staggered plantings for more consistent harvest; and integration of edible and non-edible plants.

There are also nearly 100 types of common garden flowers that are edible and please the palate. Some of the most popular include bachelor button, bee balm, borage, calendula, chamomile,

chive flowers, dandelion, daylily, dianthus, hibiscus, impatiens, lilac, marigold, mint, nasturtium, pansy, and violet. However it has been reported that for some people, eating pollen can trigger allergic reactions, or asthma. It is also important that you do not eat any flower unless you are certain of its identity. Some highly toxic flowers include azaleas, belladonna, calla lily, castor bean, crocus, foxglove, lily-of-the-valley, nightshade, and rhododendron.

Some ideas for starters:

Lettuce, Kale, Greens – can grow in cooler temperatures of spring and late fall as well as all summer long. Many varieties pose a range of pleasing colors and flavors.

Tomatoes – many heirloom varieties are available with delicious flavors and colors.

Squash – presents lovely blossoms, which can be harvested and eaten before allowing them to mature into the fruit of the plant.

Peas and Beans – consider growing these plants on a decorative lattice, archway, or even teepee structure as a focal point in an area of the landscape.

Blueberry, Raspberry, or Blackberry bushes – just a couple can provide large yields with proper care and management. Some new varieties are now available with easier management practices (i.e. Primocane Blackberry's).

Strawberry – Everbearer strawberries bloom and produce fruit for a majority of the summer and fall until the first frost.



Economics

No economic information has been located specifically for this topic. Due to the wide range of incorporation, the cost of such can range greatly as well. It was indicated on the Path to Freedom website that 100 sq.ft. of garden (10 ft. x 10 ft.) can produce up to 100 lbs. of fruits and vegetables given proper management and production techniques.

References and More Information

References for this paper:

- Food Not Lawns
www.foodnotlawns.com
- Path to Freedom
<http://pathtofreedom.com/journal>
- Ohio State University Extension – Edible

Landscaping Factsheet
<http://ohioline.osu.edu/hyg-fact/1000/1255.html>

- University of Florida Extension – Edible Landscaping for Urban Sustainability
<http://edis.ifas.ufl.edu/EP146>
- Purdue Cooperative Extension – Fruits and Nuts for Edible Landscaping
<http://www.hort.purdue.edu/ext/HO-190.pdf>
- The National Sustainable Agriculture Information Service – Edible Flowers
www.attra.ncat.org
- Association of Specialty Cut Flower Growers
www.ascfg.org
- Cornell University Poisonous Plants Information Database
www.ansci.cornell.edu/plants/index.html
- Iowa State University Extension – Edible Flowers
www.extension.iastate.edu/publications/rg302.pdf
- Colorado State University Cooperative Extension – Edible Flowers
<http://www.ext.colostate.edu/pubs/garden/07237.PDF>
- Edible Landscaping by Joanne Poyourow
<http://legacyla.net/EdibleLandsc.pdf>
<http://legacyla.net>
- Hemenway, Toby, *Gai'a's Garden: A guide to home scale Permaculture*. Chelsea Green Publishing; 2001.

- Woodrow, Linda, *The Permaculture Home Garden*. Allen Lane: 1920.

Further References:

- Key Points of Control and Management of Microbial Food Safety Concerns for Edible Landscape and Home Gardening
http://groups.ucanr.org/UC_GAPs/Key_Points_-_Edible_Landscape_and_Home_Gardening/
- Santa Fe Permaculture
<http://www.sfpermaculture.com/services.html>
- The Dirt Doctor - Edible Flowers
http://www.dirtdoctor.com/view_question.php?id=379
- The Urban Farmer
http://www.theurbanfarmer.ca/edible_landscaping.html

Center for Innovative Food Technology
5555 Airport Hwy. Suite 100,
Toledo, OH 43615
www.cift.eisc.org
P: 419.534.3710
F: 419.531.8412